

EXHIBIT 12

HIGHLY CONFIDENTIAL

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

The State of Texas, et. al.
Plaintiff,

v.

Google LLC, Defendant.

Case No: 4:20-cv-00957-SDJ

Rebuttal Report of Matthew Weinberg

Dated: September 9, 2024



Matthew Weinberg

233. “Under Projects Bernanke and Global Bernanke, GDN increased its revenue at the expense of non-Google ad buying tools.”³⁴²
234. “Projects Bernanke and Global Bernanke did not benefit GDN advertisers, but decreased win rates for advertisers using non-Google ad buying tools.”³⁴³
235. “Advertisers would have shaded their bids to maximize their payoff had they known about Projects Bernanke and Global Bernanke.”³⁴⁴
236. “When combined with (Enhanced) Dynamic Allocation, Projects Bernanke and Global Bernanke enabled AdX to have a higher win rate, which would cause other exchanges to have a lower win rate.”³⁴⁵

A. Project Bernanke’s impact should be evaluated according to the Weinberg Framework.

237. My Opening Report evaluated Project Bernanke’s impact according to the Weinberg Framework, focusing on Default Advertisers who truthfully report their objectives to GDN.³⁴⁶ The Milgrom Report contests this analysis and claims a proper analysis should instead use the Milgrom Framework and focus on Sophisticated Advertisers who optimize their inputs to GDN.³⁴⁷
238. As discussed in Section V., the Weinberg Framework applies instead of the Milgrom Framework. Therefore, any rebuttals by Google’s experts that only contest the Weinberg Framework are incorrect.
239. Moreover, Theorem 1 of the Milgrom Report has a hidden assumption that requires the Milgrom Framework.³⁴⁸ Because the Weinberg Framework, rather than the Milgrom

³⁴² Expert Report of M. Weinberg, Section VIII.D.1.

³⁴³ Expert Report of M. Weinberg, Section VIII.E.1.

³⁴⁴ Expert Report of M. Weinberg, Section VIII.E.2.

³⁴⁵ Expert Report of M. Weinberg, ¶262.

³⁴⁶ See Expert Report of M. Weinberg, Section VIII.E.2.

³⁴⁷ See Expert Report of P. Milgrom, ¶145 (“I fully account for the incentives for [...] Google Ads advertisers to change their bids in response to the bid optimization programs.”).

³⁴⁸ Specifically, when the report invokes the “revelation principle” in its proof, the report implicitly assumes that bidders are best-responding in Bayes-Nash equilibrium. During periods when Project Bernanke and Global Bernanke used a first-price payment rule, this assumption holds only for Sophisticated Advertisers and *not* for Default Advertisers. During periods where Project

Framework, is best-suited to analyze the impact of Google's Deceptive Conduct, Theorem 1 of the Milgrom Report and all conclusions derived from it are irrelevant.³⁴⁹

B. Project Bernanke is an auction modification and should be disclosed.

240. The Milgrom Report considers Project Bernanke a “bidding strategy,”³⁵⁰ and claims that concealing it “benefited Google’s customers.”³⁵¹ Based on the evidence, I disagree.
241. In my opinion, a “bidding strategy” should aim to optimize the objectives of the bidder, who in this case is an advertiser. Buy-Side DRS, Project Bernanke, and Global Bernanke³⁵² did not optimize on behalf of GDN advertisers, so in my opinion it is unreasonable to call it a “bidding strategy.”
242. Instead, these Project Bernanke variants, had they been disclosed, would have created a new auction game for GDN advertisers to play: they should strategically decide what information to share with GDN (so this information can now be thought of as their “bids”), and once all GDN and non-GDN bidders have submitted their bids, Project Bernanke and AdX define an allocation rule (who wins the impression) and a pricing rule (how much the winner pays).
243. Therefore, it is my opinion that concealing Project Bernanke is closer to an auctioneer concealing aspects of the auction format from some bidders much more so than a bidder concealing aspects of their bidding strategy from rivals.
244. Numerous internal Google documents support this view too, and refer to GDN’s internal mechanism that decides which bids to submit to AdX as the “CAT2 auction.”³⁵³

Global Bernanke used threshold payments, both Sophisticated and Default Advertisers would best-respond by bidding truthfully (because the auction is actually truthful.)

³⁴⁹ During periods where the Weinberg and Milgrom Frameworks disagree (i.e. when Project Bernanke and Global Bernanke used a first-price payment rule, and therefore Sophisticated and Default behavior differ).

³⁵⁰ Expert Report of P. Milgrom, ¶172.

³⁵¹ Expert Report of P. Milgrom, Section IV.D.6 (“Confidentiality About Bidding Practices [...] Benefited Google’s Customers”).

³⁵² During periods with a first-price payment rule.

³⁵³ Design Doc, “Dynamic Revshare for AdWords on AdX” (Jul. 13, 2012), GOOG-DOJ-13605152, at -152 (“Currently, AdWords runs an auction (aka CAT2 auction, pre-auction) to select the highest bidding creative (or bundle of creatives) to compete in the AdX auction.”) Also called the “CAT2 auction.” GOOG-NE-11753797 at -37. February 11, 2019. “DVAA Quality, Formats, O&O - Q1 2019 All Hands.”

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ERRATA TO SEPTEMBER 9, 2024 REBUTTAL REPORT
OF MATTHEW WEINBERG

OCTOBER 1, 2024

I submitted a report in this matter on September 9, 2024. Upon further review of my report, I have identified errata as listed in Appendix A attached hereto. None of these changes affect my opinions in this case.

October 1, 2024

A handwritten signature in black ink, appearing to read 'Matthew Weinberg', written over a horizontal line.

Matthew Weinberg

Appendix A

APPENDIX A

Reference	Text	Corrected Text
¶ 44	Default Participants and Sophisticated Participants (<i>i.e.</i> , collectively, all participants).	predominantly Default participants, acknowledging some are not.
¶ 113		[Redact last sentence of ¶ 113 (vi)]
¶ 213	<i>only</i>	<i>primarily</i>
¶ 213	After providing justification for the Weinberg Framework, there are no further rebuttals to address regarding these claims.	[Delete text]
Section G Header	RPO	DRSv2
FN 13	During periods when Project Bernanke used a first-price payment rule.	[Delete text]
FN 117		[Redact footnote]